

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 4

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| Application Number | 10/632,083 |
| Filing Date | 07-31-2003 |
| First Named Inventor | STROBEL |
| Group Art Unit | 1626 |
| Examiner Name | Powers, F. |
| Attorney Docket Number | DEAV2002/0057 - US - NP |

U.S. PATENT DOCUMENTS

| Examiner Initials* | Cite No.† | U.S. Patent Document | | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
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| | | Number | Kind Code‡ (If known) | | | |
| STP ↑ | | 20030055093 | | STROBEL | 03-20-2003 | |
| | | 20030022935 | | STROBEL | 01-30-2003 | |
| | | 20040225013 | | STROBEL | 11-11-2004 | |
| | | 20030055087 | | SHINKAI, et al. | 03-20-2003 | |
| | | 20040142976 | | KAWAI, et al. | 07-22-2004 | |
| | | 5,527,815 | | TOMIYAMA, et al. | 06-18-1996 | |
| | | 5,753,662 | | PEGLION, et al. | 05-19-1998 | |
| | | 6,048,880 | | KAWAI, et al. | 04-11-2000 | |
| | | 6,258,829 | | TAKAHASHI, et al. | 07-10-2001 | |
| | | 6,278,027 | | TOMIYAMA, et al. | 08-21-2001 | |
| | | 6,410,561 | | SHINKAI, et al. | 06-25-2002 | |
| | | 6,696,470 | | KAWAI, et al. | 02-24-2004 | |
| | | 6,759,412 | | STROBEL | 07-06-2004 | |
| | | 6,617,359 | | STROBEL | 09-09-2003 | |
| STP ↓ | | 6,812,253 | | STROBEL | 11-02-2004 | |
| | | 20050054729 | | STROBEL | 03-10-2005 | |
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FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner
Signature**

Fiona T. Bowers

Date Considered

3/8/06

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| Sheet | 2 | of | 4 | |

| OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS | | | |
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| Examiner Initials ¹ | Cite No. ² | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| FTP ↑ | | BIANCHI, et al., Regioselectivity in the Reactions of Benzonitrile N-Phenyl-Imide and Some Benzonitrile N-Oxides with α,β-Unsaturated Ketones., J. Chem. Res, Synop. (1981) 6-7 | |
| | | BINDER, et al., A Facile Route to Functionalized Cyclopenta [b] thiophenones Based on the Structure of the Selective COX-2 Inhibitor Flosulide, Monatsh. Chem 129, (1998), 887-896 | |
| | | CAPRATHE, et al., Dopamine Autoreceptor Agonists as Potential Antipsychotics. 3. 1 6-Propyl-4,5,5a,6,7,8-hexahydrothiazolo [4,5-f] quinolin-2-amine, J. Med. Chem. 34, (1991), 2736-2746 | |
| | | DAMMERTZ, et al., Synthese Von 6,7,8,9-Tetrahydro-5H-cyclohepta[b] pyridin-5-on, Arch. Pharm. 310 (1977), 172-176 | |
| | | ENDRES, et al., Stroke Protection By 3-Hydroxy-3-Methylglutaryl (HMG) - CoA Reductase Inhibitors Medicated By Endothelial Nitric Oxide Synthase, Proc. Natl. Acad. Sci. USA, 95 (1998) 8880-8885 | |
| | | HICKS, et al., The Synthesis And Photochemical Behaviour Of Some Annelated Tropones, J. Chem. Soc. Perkin Trans. 1, (1984) 2297-2304 | |
| | | HOFFMAN, et al., Synthesis Of 3-Nitro-5-Acylpyridines By Condensation Of Sodium Nitromalonadehyde/Tosyl Chloride With 2-Amino-1-Acyl Olefins. Evidence For the Intermediacy of 3-Chloro-2-Nitroacrolein, J. Org. Chem. 49 (1984), 193-195 | |
| | | HUANG, et al., The Improved Preparation Of 7,8-Dihydro-Quinoline-5(6H)-One and 6,7-Dihydro-5H-1-Pyridin-5-One, Synth. Commun. 28 (1998), 1197-1200 | |
| FTP ↓ | | JONES, et al., Synthesis Of 4H-Cyclohepta [b] thiophen-4-ones, 4H-Cyclohepta [b] furan-4-one, and 9H-Cyclohepta[b] pyridin-9-one, J. Chem. Soc., Perkin Trans., 1, (1973), 968-972 | |
| | | KOEHLER, et al., Potential Anticancer Agents IX. Tetrahydroquinazoline Analogs Of Tetrahydrofolic Acid. I, J. Am. Chem. Soc. 80 (1958) 5779-5785 | |

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| | | Examiner Name | Powers, F. | | |
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| OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS | | | |
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| Examiner Initials ¹ | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| FTP ↑ | | LI, et al., Activation Of Protein Kinase Ca and/or e Enhances Transcription of the Human Endothelial Nitric Oxide Synthase Gene, Mol. Pharmacol. 53 (1998) 630-637 | |
| | | MACDOWELL, et al., The Use Of 2,5-Dichlorothiophene In The Synthesis Of 3,4-Disubstituted Thiophenes, J. Org. Chem. Soc. 32 (1967) 1226-1229 | |
| | | MOROI, et al., Interaction of Genetic Deficiency of Endothelial Nitric Oxide, Gender, and Pregnancy in Vascular Response to Injury in Mice, J. Clin. Invest., 101 (1998) 1225-1232 | |
| | | MURARO, et al., Heterocycles sulfures condenses. - Synthese et dechloration de dichloro-1,3 thieno (c) cyclonones., Bull. Soc. Chim. Fr., Pt. 2, (1973) 335-342 | |
| | | MURARO, et al., Recherches dans le domaine des thieno (c) cyclonones., C.R. Acad. Sci., Ser. C, 273 (1971) 1362-1367 | |
| | | NAKAYAMA, et al., T- 786 - C Mutation in the 5' -Flanking Region of the Endothelial Nitric Oxide Synthase Gene Is Associated With Coronary Spasm, Circulation 99 (1999) 2864-2870 | |
| | | NAYYAR, et al., New Approach for the General Synthesis of Oxotetrahydroindoles via Intramolecular Cycloadditions of Azomethine Ylides with Tethered Alkynes, J. Org. Chem. 62 (1997) 982-991 | |
| | | RAVINA, et al., Conformationally Constrained Butyrophenones with Mixed Dopaminergic (D2) and Serotonergic (5-HT2A, 5-HT2C) Affinities: Synthesis, Pharmacology, 3D-QSAR, and Molecular Modeling of (Aminoalkyl) benzo- and - thienocycloalkanones as Putative Atypical Antipsychotics, J. Med. Chem. 42 (1999) 2774-2797 | |
| | REIMANN, et al., Regioselektive Synthese von 4-Methyl-1-pyridin-5-on, Pharmazie 50 (1995) 589-592 | | |
| FTP ↓ | | RUANGSIYANAND, et al., Enamine Cyclischer 1,3-Diketone als Ausgangsstoffe fur Pyridinringsynthesen, Chem. Ber. 103 (1970) 2403-2410 | |

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| FTP | | SCHENONE, et al., Reaction of 2-Dimethylaminomethylene-1,3-diones with Dinucleophiles. I. Synthesis of 1,5-Disubstituted 4-Acylpyrazoles, J. Heterocyclic Chem., 19 (1982) 1355-1361 | |
| | | SCHROEDER, et al., Nichtsteroidale Entzündungshemmer. 3. Substituierte Aza-Tetralin - und Aza-indancarbonsauren Mit Antiphlogistischer Wirkung, J. Med. Chem. - Chim. Ther. 14 (1979) 309-315 | |
| | | SESSA, et al., Chronic Exercise In Dogs Increases Coronary Vascular Nitric Oxide Production And Endothelial Cell Nitric Oxide Synthase Gene Expression, Circ. Research 74 (1994) 349-353 | |
| | | SHIGEKI, et al., 7-Oxocyclopenta[d]Pyrimidine Derivative, esp@cenet database - 12 - Document Bibliography and Abstract, no date available. | |
| | | TAKESHI, et al., Benzoic Acid Derivative Or Its Salt, esp@cenet database -12 - Document Bibliography and Abstract, no date available. | |
| | | VARENNE, et al., Percutaneous Gene Therapy Using Recombinant Adenoviruses Encoding Human Herpes Simplex Virus Thymidine Kinase, Human PAI-1, and Human NOS3 in Balloon-Injured Porcine Coronary Arteries, Hum. Gene Ther. 11 (2000) 1329-1339 | |
| FTP | | WESTERWELLE, et al., B-Aminoketone als Schlüsselverbindungen zur Synthese von Pyridinen: Ein Neuer, Leistungsfähiger Zugang zu Kondensierten Bi- und Terpyridinen, Chem. Ber. 124 (1991) 571-576 | |
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